FILE 'USPAT' ENTERED AT 11:04:57 ON 13 OCT 1998

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 *      WELCOME TO THE          *
 *   U.S. PATENT TEXT FILE      *
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```

=> s epo

L1 4853 EPO

=> s epo and erythropoietin

4853 EPO
1330 ERYTHROPOIETIN
L2 349 EPO AND ERYTHROPOIETIN

=> s GM-CSF or G-CSF or IL-1 or IL-4

43377 GM
4194 CSF
1236 GM-CSF
(GM(W)CSF)
1023387 G
4194 CSF
846 G-CSF
(G(W)CSF)
12306 IL
2357455 1
2330 IL-1
(IL(W)1)
12306 IL
2300535 4
734 IL-4
(IL(W)4)
L3 3316 GM-CSF OR G-CSF OR IL-1 OR IL-4

=> s l2 (p) l3 (p) pharmaceut?

WARNING - PROXIMITY OPERATOR PRECEDENCE LEVEL CONFLICTS OR IS NOT CONSIS
TENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2 (P) L3'
WARNING - PROXIMITY OPERATOR PRECEDENCE LEVEL CONFLICTS OR IS NOT CONSIS
TENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L3 (P) PHARMACEU'
92330 PHARMACEUT?
L4 143 L2 (P) L3 (P) PHARMACEUT?

=> s l2 (10a) l3 (10a) pharmaceut?

WARNING - PROXIMITY OPERATOR PRECEDENCE LEVEL CONFLICTS OR IS NOT CONSIS
TENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2 (10A) L3'
WARNING - PROXIMITY OPERATOR PRECEDENCE LEVEL CONFLICTS OR IS NOT CONSIS
TENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L3 (10A) PHARMACEU'
92330 PHARMACEUT?
L5 143 L2 (10A) L3 (10A) PHARMACEUT?

=> s epo (p) IL-4 (p) pharmaceut?

4853 EPO
12306 IL
2300535 4
734 IL-4
(IL(W)4)
92330 PHARMACEUT?
L6 2 EPO (P) IL-4 (P) PHARMACEUT?

=> d 1-2 date kwic

L6: 1 of 2

TITLE: Use of interleukin-4- for lowering blood-cholesterol levels
US PAT NO: 5,188,827 DATE ISSUED: Feb. 23, 1993
[IMAGE AVAILABLE]
APPL-NO: 07/688,615 DATE FILED: Jun. 10, 1991
PCT-NO: PCT/US89/05532 PCT-FILED: Dec. 18, 1989
371-DATE: Jun. 10, 1991
102(E)-DATE: Jun. 10, 1991

DETDESC:

DETD(7)

To complement the cholesterol lowering effect of the **IL**-**4**, it may be useful to administer it in conjunction with other **pharmaceutically** active compounds. For example, it can be combined with other cholesterol lowering agents [e.g., granulocyte-macrophage colony stimulating factor (GM-CSF)(U.S. Patent. . . Princeton, N.J.]. For lowering cholesterol levels that may be associated with acute manifestations of heart disease such as myocardial infarction, **IL**-**4** can be administered in conjunction with thrombolytic agents [e.g., tissue plasminogen activators (tPAs) (for example, those disclosed in U.S. Pat. Nos. 4,370,417, 4,752,603; U.K. Patent No. 2,119.804; PCT Patent Application Nos. 87/05934, 87/04722, 84/01786; Australian Patent Application No. 55514/86; **EPO** Patent Application Nos. 227,462, 234,051, 238,304, and 174,835, and the tPA that is commercially available from Genentech, Inc., South San. . . by reference to illustrate examples of other cholesterol lowering agents and thrombolytic agents that can be used in combination with **IL**-**4** in certain embodiments of the present invention. The specific cholesterol lowering agents and thrombolytic agents mentioned above are merely examples. . .

L6: 2 of 2

TITLE: Cysteine added variants of interleukin-3 and chemical modifications thereof
US PAT NO: 5,166,322 DATE ISSUED: Nov. 24, 1992
[IMAGE AVAILABLE]
APPL-NO: 07/341,990 DATE FILED: Apr. 21, 1989

DETDESC:

DETD(15)

The . . . GM-CSF, CSF-1 (in its various known forms; CSF-1 is also referred to as M-CSF or macrophage colony-stimulating factor), G-CSF, Meg-CSF, **EPO**, IL-1, IL-2, **IL**-**4**, IL-6, B-cell growth factor, B-cell differentiation factor and eosinophil differentiation factor. Additionally, the CAVs of the present invention may be. . . above would be adjusted to compensate for such additional components in the therapeutic composition or regimen. In the case of **pharmaceutical** compositions containing modified lymphokine CAVs, for example, progress of the treated patient can be monitored by periodic assessment of the. .

=> s epo (p) (G-CSF) (p) pharmaceut?

4853 EPO
1023387 G
4194 CSF
846 G-CSF
(G(W)CSF)
92330 PHARMACEUT?
L7 12 EPO (P) (G-CSF) (P) PHARMACEUT?

=> d 1-12 date kwic

L7: 1 of 12

TITLE: Agrobacterium tumefaciens transformation of Musa species
US PAT NO: 5,792,935 DATE ISSUED: Aug. 11, 1998
[IMAGE AVAILABLE]
APPL-NO: 08/652,521 DATE FILED: Jun. 5, 1996
PCT-NO: PCT/US94/14210 PCT-FILED: Dec. 9, 1994
371-DATE: Jun. 5, 1996
102(E)-DATE: Jun. 5, 1996
PCT-PUB-NO: WO95/15678 PCT-PUB-DATE: Jun. 15, 1995
REL-US-DATA: Continuation of Ser. No. 341,461, Nov. 17, 1994, abandoned, which is a continuation of Ser. No. 164,296, Dec. 9, 1993, abandoned.

DETDESC:

DETD(16)

The . . . This includes the production of important proteins or other products for commercial use, such as lipase, melanin, pigments, antibodies, hormones, **pharmaceuticals** such as, but not limited to, interleukins, **EPO**, **G**-**CSF**, GM-CSF, hPG-CSF, M-CSF, Factor VIII, Factor IX, tPA, hGH, receptors, insulin, vaccines, antibiotics and the like. Useful vaccines include, but. . . to convert a natural product to a unique product. This includes, for example, the production of secondary metabolites useful as **pharmaceuticals**. Alternatively, the method may be used to alter cellular metabolism leading to altered flavor of fruit(s) or altered plant pigmentation. . .

L7: 2 of 12

TITLE: Agonist peptide dimers
US PAT NO: 5,767,078 DATE ISSUED: Jun. 16, 1998
[IMAGE AVAILABLE]
APPL-NO: 08/484,135 DATE FILED: Jun. 7, 1995

DETDESC:

DETD(35)

In a further embodiment of the present invention, **pharmaceutical** compositions comprising at least one of the dimers of this invention can be employed to therapeutically treat disorders resulting from deficiencies of biological factors such as **EPO**, GH, GM-CSF, **G**-**CSF**, EGF, PDGF, VEGF, insulin, FGF and the like. These **pharmaceutical** compositions may contain buffers, salts and other excipients to stabilize the composition or assist in the delivery of the dimerized. . .

L7: 3 of 12

TITLE: Compositions of soluble C-kit ligand and hematopoietic factors

US PAT NO: 5,767,074 DATE ISSUED: Jun. 16, 1998
[IMAGE AVAILABLE]

APPL-NO: 08/341,456 DATE FILED: Nov. 17, 1994

REL-US-DATA: Continuation of Ser. No. 873,962, Apr. 23, 1992, abandoned, which is a continuation-in-part of Ser. No. 594,306, Oct. 5, 1990, which is a continuation-in-part of Ser. No. 573,483, Aug. 27, 1990, abandoned.

DETDESC:

DETD(11)

Also provided by this invention is a **pharmaceutical** composition for the treatment of anemia in a mammal, which comprises an effective amount of the **pharmaceutical** composition described hereinabove and an effective amount of **EPO** (erythropoietin) or IL-3, effective to treat anemia in a mammal. Anemia encompasses, but is not limited to Diamond Black fan anemia and aplastic anemia. However, for the treatment of Black fan anemia and aplastic anemia, a **pharmaceutical** composition comprising an effective amount of the composition described hereinabove and an effective amount of **G**-**CSF** and GM-CSF, effective to treat anemia is preferred. A method of treating anemia in mammals by administering to the mammals the above composition is further provided by this invention. A **pharmaceutical** composition effective for enhancing bone marrow during transplantation in a mammal which comprises an effective amount of the **pharmaceutical** composition described hereinabove, and an effective amount of IL-1 or IL-6, effective to enhance engraphment of bone marrow during transplantation in the mammal is also provided. A **pharmaceutical** composition for enhancing bone marrow recovery in the treatment of radiation, chemical or chemotherapeutic induced bone marrow, aplasia or myelosuppression is provided by this inventions which comprises an effective amount of the **pharmaceutical** composition described hereinabove and an effective amount of IL-1, effective to enhance bone marrow recovery in the mammal. Also provided by this invention is a **pharmaceutical** composition for treating acquired immune deficiency syndrome (AIDS) in a patient which comprises an effective amount of the **pharmaceutical** composition described hereinabove and an effective amount of AZT or **G**-**CSF**, effective to treat AIDS in the patient.

L7: 4 of 12

TITLE: Potyvirus vectors for the expression of foreign genes

US PAT NO: 5,766,885 DATE ISSUED: Jun. 16, 1998
[IMAGE AVAILABLE]

APPL-NO: 08/468,067 DATE FILED: Jun. 6, 1995

REL-US-DATA: Continuation-in-part of Ser. No. 146,881, Nov. 1, 1993, Pat. No. 5,491,076.

DETDESC:

DETD(20)

The . . . This includes the production of important proteins or other products for commercial use, such as lipase, melanin, pigments, antibodies, hormones, **pharmaceuticals** such as, but not limited to, interleukins, **EPO**, **G**-**CSF**, GM-CSF, hPG-CSF, M-CSF, Factor VIII, Factor IX, tPA, hGH, receptors, insulin, vaccines, antibiotics and the like. The coding sequences for. . . to convert a natural product to a unique product. This includes, for example, the production of secondary metabolites useful as **pharmaceuticals**. Alternatively, the vector may be used to produce degradative or inhibitory enzymes.

L7: 5 of 12

TITLE: Method for purifying thrombopoietin

US PAT NO: 5,744,587 DATE ISSUED: Apr. 28, 1998
[IMAGE AVAILABLE]

APPL-NO: 08/484,246 DATE FILED: Jun. 7, 1995

SUMMARY:

BSUM(34)

For **pharmaceutical** use, TPO is formulated for parenteral, particularly intravenous or subcutaneous, delivery according to conventional methods. Intravenous administration will be by bolus injection or infusion over a typical period of one to several hours. In general, **pharmaceutical** formulations will include TPO in combination with a **pharmaceutically** acceptable vehicle, such as saline, buffered saline, 5% dextrose in water or the like. Formulations may further include one or. . . administered in separate formulations. Methods of formulation are well known in the art and are disclosed, for example, in Remington's **Pharmaceutical** Sciences, Gennaro, ed., Mack Publishing Co., Easton Pa., 1990, which is incorporated herein by reference. Therapeutic doses will generally be. . . TPO can also be administered in combination with other cytokines such as IL-3, -6 and -11; stem cell factor; erythropoietin (**EPO**); **G**-**CSF** and GM-CSF. Within regimens of combination therapy, daily doses of other cytokines will in general be: **EPO**, .ltoreq.150 U/kg; GM-CSF, 5-15 .mu.g/kg; IL-3, 1-5 .mu.g/kg; and **G**-**CSF**, 1-25 .mu.g/kg. Combination therapy with **EPO**, for example, is indicated in anemic patients with low **EPO** levels.

L7: 6 of 12

TITLE: Methods for producing thrombopoietin polypeptides using a mammalian tissue plasminogen activator secretory peptide

US PAT NO: 5,641,655 DATE ISSUED: Jun. 24, 1997
[IMAGE AVAILABLE]

APPL-NO: 08/347,029 DATE FILED: Nov. 30, 1994

DETDESC:

DETD(38)

For **pharmaceutical** use, TPO is formulated for parenteral, particularly intravenous or subcutaneous, delivery according to conventional methods. Intravenous administration will be by bolus injection or infusion over a typical period of one to several hours. In general, **pharmaceutical** formulations will include TPO in combination with a **pharmaceutically** acceptable vehicle, such as saline, buffered saline, 5% dextrose in water or the like. Formulations may further include one or. . . administered in separate formulations. Methods of formulation are well known in the art and are disclosed, for example, in Remington's **Pharmaceutical** Sciences, Gennaro, ed., Mack Publishing Co., Easton Pa., 1990, which is incorporated herein by reference. Therapeutic doses of TPO will. . . TPO can also be administered in combination with other cytokines such as IL-3, -6 and -11; stem cell factor; erythropoietin; **G**-**CSF** and GM-CSF. Within regimens of combination therapy, daily doses of other cytokines will in general be: **EPO**, .ltoreq.150 U/kg; GM-CSF, 5-15 .mu.g/kg; IL-3, 1-5 .mu.g/kg; and **G**-**CSF**, 1-25 .mu.g/kg. Combination therapy with **EPO**, for example, is indicated in anemic patients with low **EPO** levels.

L7: 7 of 12

TITLE: Compositions and methods for enhanced drug delivery

US PAT NO: 5,607,691 DATE ISSUED: Mar. 4, 1997
[IMAGE AVAILABLE]

APPL-NO: 08/449,188 DATE FILED: May 24, 1995

REL-US-DATA: Continuation of Ser. No. 164,293, Dec. 9, 1993, abandoned, which is a continuation-in-part of Ser. No. 77,296, Jun. 14, 1993, abandoned, which is a continuation-in-part of Ser. No. 898,219, Jun. 12, 1992, abandoned, and a continuation-in-part of Ser. No. 9,463, Jan. 27, 1993, abandoned.

DETDESC:

DETD(144)

Other preferred protein and peptide drugs and amino acid-based **pharmaceutical** agents include **G**-**CSF**, a colony stimulating factor that stimulates production of granulocytes, particularly neutrophils; GM-CSF, a colony stimulating factor that stimulates production of. . . naturally secreted by the .beta. cells of the pancreas (when stimulated by glucose and the parasympathetic nervous system); antibodies (subfragments); **EPO**, a glycoprotein hormone produced in the kidneys which stimulates the bone marrow to produce red blood cells; the interleukins; interferon-gamma,. . . acid, Eli Lilly and Company, Indianapolis, Ind.); Sandimmune.RTM., an immunosuppressive (cyclosporine, a cyclic polypeptide consisting of 11 amino acids, Sandoz **Pharmaceuticals** Corporation, East Hanover, N.J.); Premaxin.RTM., an antiinfective (Imipenem-cilastatin sodium, Merck); Fortaz.RTM., an antiinfective (ceftazidime, Glaxo **Pharmaceuticals**, Research Triangle Park, N.C.); Amoxil, an antiinfective (amoxicillin, Beecham Laboratories, Bristol, Tenn.); Humulin.RTM., an antidiabetic (human insulin recombinant DNA origin,. . .

L7: 8 of 12

TITLE: Oral dosage form of biologically active proteins

US PAT NO: 5,597,562 DATE ISSUED: Jan. 28, 1997
[IMAGE AVAILABLE]

APPL-NO: 08/167,721 DATE FILED: Dec. 15, 1993
FRN-PR. NO: 2-145231 FRN FILED: Jun. 1, 1990
FRN-PR. CO: Japan
FRN-PR. NO: 3-149737 FRN FILED: May 24, 1991
FRN-PR. CO: Japan

REL-US-DATA: Continuation of Ser. No. 994,076, Dec. 17, 1992,

abandoned, which is a continuation of Ser. No. 709,622, Jun. 3, 1991, abandoned.

SUMMARY:

BSUM(14)

Provided by the present invention are novel **pharmaceutical** preparations that allow for efficient absorption of **G**-**CSF** or **EPO** from the gastrointestinal tract and novel methods for manufacturing such preparations. The oral preparations provided by the present invention are characterized by comprising **G**-**CSF** or **EPO**, surfactant(s), fatty acid(s) and enteric material(s). Various aspects and advantages of the present invention will be apparent upon consideration of. . .

DETDESC:

DETD(10)

Organic . . . invention. Preferably, however, a buffer solution or distilled water is used in order to avoid inactivation of the principal ingredient, **G**-**CSF** or **EPO**, as well as to eliminate the influence of residual solvents. Furthermore, it is preferable to avoid thermal treatment in manufacturing process as above-described, in order to minimize inactivation of **G**-**CSF** or **EPO**. Lyophilization is not an essential process in the manufacturing of the oral dosage form provided by the present invention but is effective to provide high contents of the principal ingredient in the **pharmaceutical** preparations.

L7: 9 of 12

TITLE: Process for the production of multi-dose pharmaceutical preparations containing isolated or recombinantly produced human protein for infusion or injection purposes
US PAT NO: 5,503,827 DATE ISSUED: Apr. 2, 1996
[IMAGE AVAILABLE]
APPL-NO: 08/193,002 DATE FILED: Feb. 15, 1994
FRN-PR. NO: 41 26 983.7 FRN FILED: Aug. 15, 1991
FRN-PR. CO: Federal Republic of Germany
PCT-NO: PCT/EP92/01822 PCT-FILED: Aug. 10, 1992
371-DATE: Feb. 15, 1994
102(E)-DATE: Feb. 15, 1994
PCT-PUB-NO: WO93/03744 PCT-PUB-DATE: Mar. 4, 1993

SUMMARY:

BSUM(4)

Stabilized **pharmaceutical** preparations containing human protein which contain inter alia, urea and various amino acids, are known from EP 0 306 824, in which **EPO** and **G**-**CSF** in particular are mentioned by way of example as human proteins.

L7: 10 of 12

TITLE: Expression of foreign genes using a replicating polyprotein producing virus vector
US PAT NO: 5,491,076 DATE ISSUED: Feb. 13, 1996
[IMAGE AVAILABLE]
APPL-NO: 08/146,881 DATE FILED: Nov. 1, 1993

DETDESC:

DETD(19)

The . . . This includes the production of important proteins or other products for commercial use, such as lipase, melanin, pigments, antibodies, hormones, **pharmaceuticals** such as, but not limited to, interleukins, **EPO**, **G**-**CSF**, GM-CSF, hPG-CSF, M-CSF, Factor VIII, Factor IX, tPA, hGH, receptors, insulin, vaccines, antibiotics and the like. The coding sequences for. . . able to convert a natural productto a unique product. This includes, for example, the production of secondary metabolites useful as **pharmaceuticals**. Alternatively, the vectormay be used to produce degradative or inhibitory enzymes.

L7: 11 of 12

TITLE: Safe vector for gene therapy
US PAT NO: 5,252,479 DATE ISSUED: Oct. 12, 1993
[IMAGE AVAILABLE]
APPL-NO: 07/789,917 DATE FILED: Nov. 8, 1991

DETDESC:

DETD(32)

Yet another aspect of the present invention provides a method for delivery of a **pharmaceutical** product, a protein or an antisense RNA in a mammal. Since the normal differentiation of these stem cells results in. . . month. Transduced cells are recognized by assaying for expression of the heterologous gene, as described hereinabove. In this embodiment, the **pharmaceutical** product is encoded by the heterologous gene of the hybrid vector, and can be any **pharmaceutical** product capable of being expressed by the hybrid vector. Such products include .alpha.,.beta. and .gamma.-globin, insulin, GM-CSF, M-CSF, **G**-**CSF**, **EPO**, TNF, MGF, interleukins, the gene product of the retinoblastoma gene, p53 or adenosine deaminase. Therefore, the present invention can provide. . .

L7: 12 of 12

TITLE: Cysteine added variants of interleukin-3 and chemical modifications thereof
US PAT NO: 5,166,322 DATE ISSUED: Nov. 24, 1992
[IMAGE AVAILABLE]
APPL-NO: 07/341,990 DATE FILED: Apr. 21, 1989

DETDESC:

DETD(15)

The . . . invention includes GM-CSF, CSF-1 (in its various known forms; CSF-1 is also referred to as M-CSF or macrophage colony-stimulating factor), **G**-**CSF**, Meg-CSF, **EPO**, IL-1, IL-2, IL-4, IL-6, B-cell growth factor, B-cell differentiation factor and eosinophil differentiation factor. Additionally, the CAVs of the present. . . above would be adjusted to compensate for such additional components in the therapeutic composition or regimen. In the case of **pharmaceutical** compositions containing modified lymphokine CAVs, for example, progress of the treated patient can be monitored by periodic assessment of the. . .

=> s GlyGlyGlySer or (Gly Gly Gly Ser)

8 GLYGLYGLYSER
10107 GLY
10107 GLY
10107 GLY
666520 SER
65 GLY GLY GLY SER
(GLY(W)GLY(W)GLY(W)SER)
L8 67 GLYGLYGLYSER OR (GLY GLY GLY SER)

=> s GlyGlyGlySer

L9 8 GLYGLYGLYSER

=> d 1-8 date kwic

L9: 1 of 8

TITLE: Compounds and peptides that bind to the erythropoietin receptor
US PAT NO: 5,773,569 DATE ISSUED: Jun. 30, 1998
[IMAGE AVAILABLE]
APPL-NO: 08/484,635 DATE FILED: Jun. 7, 1995
REL-US-DATA: Continuation-in-part of Ser. No. 155,940, Nov. 19, 1993, abandoned.
SYSTEM LIMITS EXCEEDED - DISPLAY ENDED

=> s 5773569/pn and GlyGlyGlySer

1 5773569/PN
8 GLYGLYGLYSER
L10 1 5773569/PN AND GLYGLYGLYSER

=> d kwic

US PAT NO: **5,773,569** [IMAGE AVAILABLE] L10: 1 of 1
SYSTEM LIMITS EXCEEDED - DISPLAY ENDED

=> d hit

US PAT NO: **5,773,569** [IMAGE AVAILABLE] L10: 1 of 1

DETDESC:

DETD(159)

(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:
GlyGlyThrTyrSerCysHisPheGlyAlaLeuThrTrpValCysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:192:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:
GlyGlyThrTyrSerCysHisPheGlyProLeuAlaTrpValCysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:193:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:
GlyGlyThrTyrSerCysHisPheAlaProLeuThrTrpValCysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:194:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:
GlyGlyThrTyrSerCysHisPheGlyProAlaThrTrpValCysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:195:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:
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151015
ProGlnGlyGly
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(2) INFORMATION FOR SEQ ID NO:196:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:
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151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:197:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 16 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:
ThrTyrSerCysHisPheGlyProLeuThrTrpValCysLysProGln
151015
(2) INFORMATION FOR SEQ ID NO:198:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:
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1510
(2) INFORMATION FOR SEQ ID NO:199:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 13 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:
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1510
(2) INFORMATION FOR SEQ ID NO:200:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 12 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:
SerCysHisPheGlyProLeuThrTrpValCysLys
1510
(2) INFORMATION FOR SEQ ID NO:201:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 8 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:
HisPheGlyProLeuThrTrpVal
15
(2) INFORMATION FOR SEQ ID NO:202:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: circular
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(A) NAME/KEY: Cross-links
(B) LOCATION: 6..16
(D) OTHER INFORMATION: /product="OTHER"
/note= "An amide bond joins the
delta carboxyl group of Glu at
position 6 to the epsilon amine group
of Lys at position 16"
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:
GlyGlyThrTyrSerGluHisPheGlyProLeuThrTrpValLysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:203:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:
GlyGlyThrTyrArgCysSerMetGlyProMetThrTrpValCysLeu
151015
ProMetGlyGly
20
(2) INFORMATION FOR SEQ ID NO:204:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:
GlyGlyMetTyrSerCysArgMetGlyProMetThrTrpValCysGly
151015
ProSerGlyGly
20
(2) INFORMATION FOR SEQ ID NO:205:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:
GlyGlyTrpAlaTrpCysArgMetGlyProIleThrTrpValCysSer
151015
AlaHisGlyGly
20
(2) INFORMATION FOR SEQ ID NO:206:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:
GlyGlyMetTyrSerCysArgMetGlyProMetThrTrpValCysIle
151015
ProTyrGlyGly
20
(2) INFORMATION FOR SEQ ID NO:207:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GlyGlyAspTyrThrCysArgMetGlyProMetThrTrpIleCysThr
151015
AlaThrGlyGly
20
(2) INFORMATION FOR SEQ ID NO:208:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:
GlyGlyAsnTyrLeuCysArgPheGlyProGlyThrTrpAspCysThr
151015
GlyPheArgGly
20
(2) INFORMATION FOR SEQ ID NO:209:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:
GlyGlyLysAspValCysArgMetGlyProIleThrTrpAspCysArg
151015
SerThrGlyGly
20
(2) INFORMATION FOR SEQ ID NO:210:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:
GlyGlyAsnTyrLeuCysArgMetGlyProAlaThrTrpValCysGly
151015
ArgMetGlyGly
20
(2) INFORMATION FOR SEQ ID NO:211:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:
GlyGlyGluTyrLysCysArgMetGlyProLeuThrTrpValCysGln
151015
TyrAlaGlyGly
20
(2) INFORMATION FOR SEQ ID NO:212:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:
GlyGlyValTyrValCysArgMetGlyProLeuThrTrpGluCysThr
151015
AlaSerGlyGly
20
(2) INFORMATION FOR SEQ ID NO:213:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:
GlyGlyGluTyrSerCysArgMetGlyProMetThrTrpValCysSer
151015
ProThrGlyGly
20
(2) INFORMATION FOR SEQ ID NO:214:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:
GlyGlyAsnTyrIleCysArgMetGlyProMetThrTrpValCysThr
151015
AlaHisGlyGly
20
(2) INFORMATION FOR SEQ ID NO:215:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:
GlyGlyAspTyrLeuCysArgMetGlyProAlaThrTrpValCysGly
151015
ArgMetGlyGly
20
(2) INFORMATION FOR SEQ ID NO:216:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:
GlyGlyLeuTyrSerCysArgMetGlyProIleThrTrpValCysThr
151015
LysAlaGlyGly
20
(2) INFORMATION FOR SEQ ID NO:217:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:
GlyGlyGlyTyrHisCysArgMetGlyProMetThrTrpValCysArg
151015
ProValGlyGly
20
(2) INFORMATION FOR SEQ ID NO:218:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:
GlyGlyLeuTyrSerCysLeuMetGlyProIleThrTrpLeuCysLys
151015
ProLysGlyGly
20
(2) INFORMATION FOR SEQ ID NO:219:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:
GlyGlyAspTyrSerCysArgMetGlyProThrThrTrpValCysThr
151015
ProProGlyGly
20
(2) INFORMATION FOR SEQ ID NO:220:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:
GlyGlyAspTyrTrpCysArgMetGlyProSerThrTrpGluCysAsn
151015
AlaHisGlyGly
20
(2) INFORMATION FOR SEQ ID NO:221:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:
GlyGlyLysTyrLeuCysSerPheGlyProIleThrTrpValCysAla
151015
ArgTyrGlyGly
20
(2) INFORMATION FOR SEQ ID NO:222:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

GlyGlyLeuTyrLysCysArgLeuGlyProIleThrTrpValCysSer
151015
ProLeuGlyGly
20
(2) INFORMATION FOR SEQ ID NO:223:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:
GlyGlySerTyrThrCysArgPheGlyProGluThrTrpValCysArg
151015
ProAsnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:224:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:
GlyGlySerTyrSerCysArgMetGlyProIleThrTrpValCysLys
151015
ProGlyGlyGly
20
(2) INFORMATION FOR SEQ ID NO:225:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:
GlyGlySerTyrThrCysArgMetGlyProIleThrTrpValCysLeu
151015
ProAlaGlyGly
20
(2) INFORMATION FOR SEQ ID NO:226:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:
GlyGlyAspTyrThrCysArgMetGlyProIleThrTrpIleCysThr
151015
LysAlaGlyGly
20
(2) INFORMATION FOR SEQ ID NO:227:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:
GlyGlyValTyrSerCysArgMetGlyProThrThrTrpGluCysAsn
151015
ArgTyrValGly
20
(2) INFORMATION FOR SEQ ID NO:228:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:
GlyGlyAlaTyrLeuCysHisMetGlyProIleThrTrpValCysArg
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:229:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:
GlyGlyGluTyrSerCysArgMetGlyProAsnThrTrpValCysLys
151015
ProValGlyGly
20
(2) INFORMATION FOR SEQ ID NO:230:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:
GlyGlyLeuTyrThrCysArgMetGlyProIleThrTrpValCysLeu
151015
LeuProGlyGly
20
(2) INFORMATION FOR SEQ ID NO:231:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:
GlyGlyLeuTyrThrCysArgMetGlyProValThrTrpValCysThr
151015
GlyAlaGlyGly
20
(2) INFORMATION FOR SEQ ID NO:232:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:
GlyGlyValTyrLysCysArgMetGlyProLeuThrTrpGluCysArg
151015
ProThrGlyGly
20
(2) INFORMATION FOR SEQ ID NO:233:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:
GlyGlySerTyrLeuCysArgPheGlyProThrThrTrpLeuCysSer
151015
SerAlaGlyGly
20
(2) INFORMATION FOR SEQ ID NO:234:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:
GlyGlySerTyrLeuCysArgMetGlyProThrThrTrpValCysThr
151015
ArgMetGlyGly
20
(2) INFORMATION FOR SEQ ID NO:235:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:
GlyGlySerTyrLeuCysArgPheGlyProThrThrTrpLeuCysThr
151015
GlnArgGlyGly
20
(2) INFORMATION FOR SEQ ID NO:236:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:
GlyGlyGlnTyrLeuCysThrPheGlyProIleThrTrpLeuCysArg
151015
GlyAlaGlyGly
20
(2) INFORMATION FOR SEQ ID NO:237:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 8 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

ArgIleGlyProIleThrTrpVal
15
(2) INFORMATION FOR SEQ ID NO:238:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 94 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: DNA
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:
CTCTCACTCCGGAGGCNNKNNKNNKTGTCGKATKGGKCCKATKACKTGKGTK
TGTNNKNN60
KNNKGGAGGCGGGGGTAGCACTGTTGAAAGTTGT94
(2) INFORMATION FOR SEQ ID NO:239:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 29 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:
GlyGlyXaaXaaXaaXaaTyrXaaCysArgIleGlyProIleThrTrp
151015
ValCysXaaXaaXaaXaaXaaXaaGlyGlyGlySer
2025
(2) INFORMATION FOR SEQ ID NO:240:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 4 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:
GlyGlyGlySer
(2) INFORMATION FOR SEQ ID NO:241:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 26 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 5
(D) OTHER INFORMATION: /note= "Xaa = unsure amino acid"
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:
GlyGlyTyrGlnXaaPheMetGlyProGluThrTrpValCysAlaPro
151015
GluProArgValGluArgValSerGlyGly
2025
(2) INFORMATION FOR SEQ ID NO:242:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 26 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:
GlyGlyTyrLeuCysArgPheGlyProGluThrTrpThrCysAlaPro
151015
GluArgSerValValThrGlnSerGlyGly
2025
(2) INFORMATION FOR SEQ ID NO:243:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 22 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:
LeuGlyArgLysTyrSerCysHisPheGlyProValThrTrpValCys
151015
GlnProAlaLysLysAsp
20
(2) INFORMATION FOR SEQ ID NO:244:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 19 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:
GlyGlyThrTyrSerCysPheGlyProLeuThrTrpValCysLysPro
151015
GlnGlyGly
(2) INFORMATION FOR SEQ ID NO:245:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 18 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:
ThrTyrSerCysHisPheGlyProLeuThrTrpValCysLysProGln
151015
GlyGly
(2) INFORMATION FOR SEQ ID NO:246:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 12 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:
TyrSerCysHisPheGlyProLeuThrTrpValCys
1510
(2) INFORMATION FOR SEQ ID NO:247:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 4
(D) OTHER INFORMATION: /product="OTHER"
/note= "Xaa = para-nitro-phenylalanine"
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:
GlyGlyThrXaaSerCysHisPheGlyProLeuThrTrpValCysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:248:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 4
(D) OTHER INFORMATION: /product="OTHER"
/note= "Xaa = para-amino-phenylalanine"
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:
GlyGlyThrXaaSerCysHisPheGlyProLeuThrTrpValCysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:249:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 4
(D) OTHER INFORMATION: /product="OTHER"
/note= "Xaa = para-fluoro-phenylalanine"
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:
GlyGlyThrXaaSerCysHisPheGlyProLeuThrTrpValCysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:250:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 4
(D) OTHER INFORMATION: /product="OTHER"
/note= "Xaa = 3,5-dibromo-tyrosine"
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:
GlyGlyThrXaaSerCysHisPheGlyProLeuThrTrpValCysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:251:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:
GlyGlyThrTyrSerCysHisPheGlyProLeuThrPheValCysLys
151015
ProGlnGlyGly
20
(2) INFORMATION FOR SEQ ID NO:252:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 10 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 2
(D) OTHER INFORMATION: /note= "Xaa = Arg, His, or Leu"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 3
(D) OTHER INFORMATION: /note= "Xaa = Met, Phe, or Ile"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 6
(D) OTHER INFORMATION: /note= "Xaa = any amino acid"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 9
(D) OTHER INFORMATION: /note= "Xaa = Asp, Glu, Ile, Leu, or Val"
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:
CysXaaXaaGlyProXaaThrTrpXaaCys
1510
(2) INFORMATION FOR SEQ ID NO:253:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 12 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 2
(D) OTHER INFORMATION: /note= "Xaa = any amino acid"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 4
(D) OTHER INFORMATION: /note= "Xaa = Arg, His, or Leu"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 5
(D) OTHER INFORMATION: /note= "Xaa = Met, Phe, or Ile"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 8
(D) OTHER INFORMATION: /note= "Xaa = any amino acid"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 11
(D) OTHER INFORMATION: /note= "Xaa = Asp, Glu, Ile, Leu, or Val"
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:
TyrXaaCysXaaXaaGlyProXaaThrTrpXaaCys
1510
(2) INFORMATION FOR SEQ ID NO:254:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 16 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 1
(D) OTHER INFORMATION: /note= "Xaa = any amino acid"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 3
(D) OTHER INFORMATION: /note= "Xaa = any amino acid"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 5
(D) OTHER INFORMATION: /note= "Xaa = Arg, His, or Leu"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 6
(D) OTHER INFORMATION: /note= "Xaa = Met, Phe, or Ile"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 9
(D) OTHER INFORMATION: /note= "Xaa = any amino acid"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 12
(D) OTHER INFORMATION: /note= "Xaa = Asp, Glu, Ile, Leu, or Val"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 14
(D) OTHER INFORMATION: /note= "Xaa = any amino acid"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 15
(D) OTHER INFORMATION: /note= "Xaa = any amino acid"
(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 16
(D) OTHER INFORMATION: /note= "Xaa = any amino acid"
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:
XaaTyrXaaCysXaaXaaGlyProXaaThrTrpXaaCysXaaXaaXaa
151015
(2) INFORMATION FOR SEQ ID NO:255:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 27 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:
XaaXaaXaaXaaXaaXaaXaaXaaXaaTyrXaaCysXaaXaaGly
151015
ProXaaThrTrpXaaCysGlyGlyGlyGlySer
2025
(2) INFORMATION FOR SEQ ID NO:256:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 27 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:
GlyGlyXaaXaaXaaXaaTyrCysXaaXaaGlyProXaaThrTrpXaa
151015
CysXaaXaaXaaXaaXaaGlyGlyGlyGlySer
2025
(2) INFORMATION FOR SEQ ID NO:257:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 29 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:
GlyGlyTyrXaaCysXaaXaaGlyProXaaThrTrpXaaCysXaaXaa
151015
XaaXaaXaaXaaXaaXaaXaaXaaGlyGlyGlyGlySer
2025
(2) INFORMATION FOR SEQ ID NO:258:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 22 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:
XaaXaaXaaXaaTyrXaaCysHisPheGlyProLeuThrTrpValCys
151015
XaaXaaXaaXaaXaaXaa
20
(2) INFORMATION FOR SEQ ID NO:259:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 22 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:
XaaXaaXaaXaaTyrXaaCysXaaXaaGlyProGluThrTrpGluCys
151015
XaaXaaXaaXaaXaaXaa
20

=> s 5773569/pn and (SEQ ID NO: 240)

1 5773569/PN
23300 SEQ
45580 ID

1868529 NO
149793 240
45 SEQ ID NO: 240
(SEQ(W)ID(W)NO(W)240)
L11 1 5773569/PN AND (SEQ ID NO: 240)

=> d kwic

US PAT NO: **5,773,569** [IMAGE AVAILABLE] L11: 1 of 1

DETDESC:

DETD(34)

In . . . T and W) fixed, the other residues randomized and 10 additional residues between the second cysteine and the (Gly).sub.4 -Ser (**SEQ** **ID** **NO**:**240**) linker was also screened against immobilized EPO-R (see, FIG. 4B). In this library, the conserved tyrosine residue was preceded by. . .
SYSTEM LIMITS EXCEEDED - DISPLAY ENDED

=> bye

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y

U.S. Patent & Trademark Office LOGOFF AT 11:20:29 ON 13 OCT 1998